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J.R. SIMPLOT COMPANY ONE CAPITAL CENTER 999 MAIN STREET SUITE 1300 P.O. BOX 27 BOISE, IDAHO 83707-0027 (208) 336-2110 FAX (208) 389-7515

CORPORATE HEADQUARTERS

November 5, 2002

Ms. Linda Meyer (WCM-121)
Project Manager RCRA/Superfund
U.S. EPA Region 10
1200 Sixth Avenue
Seattle, WA 98101

NOV 1 2 2002

OFFICE OF WASTE & CHEM. MGMT

Subject: Eastern Michaud Flats Superfund Site – Groundwater Extraction

System Design Meeting Follow Up

Dear Ms. Meyer:

This letter provides Simplot's follow up to the groundwater extraction system design meeting attended by representatives from Simplot and its contractors, U.S. Environmental Protection Agency ("EPA") and its contractors, the Idaho Department of Environmental Quality ("IDEQ") and the Shoshone-Bannock Tribes held in Pocatello on October 16, 2002. The meeting was held to discuss Simplot's draft Groundwater Extraction System Remedial Design Report submitted in early August 2002.

In that meeting EPA and EPA's contractors expressed the opinion that the extraction system should be designed to capture 100 percent of the groundwater and that significant additional investigation and analysis would be necessary to demonstrate that the design would be 100 percent effective. As discussed at the meeting, Simplot was surprised to learn of EPA's position with regard to the groundwater remedy. Simplot has been proceeding with the development of a design that provides "hydraulic control" to achieve remedial action objectives established by EPA to protect human health and the environment and the associated substantive performance standards of drinking water maximum contaminant levels (MCLs) at the boundary with the Offplant Area. This approach is based on Simplot's participation in development and negotiation of the groundwater remedy with previous EPA project managers in the Remedial Investigation/Feasibility Study and EPA's subsequent Record of Decision, and Remedial Design/Remedial Action Consent Decree negotiations.

Under the purview of the Superfund process at the Eastern Michaud Flats Superfund Site, the groundwater remedy ultimately selected by EPA was developed to provide



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overall protection of human health and the environment and meet applicable or relevant and appropriate requirements. The logic of the remedy and the design is that within the plant area groundwater would remain with concentrations of Constituents of Concern (COCs) above MCLs and that human health is protected by prevention of use of this groundwater as a drinking water source by deed restriction. The focus of the remaining portion of the groundwater remedy is improvement of groundwater quality within the Plant Area to the extent practicable and to achieve concentration-based performance standards at points of compliance at the boundary of the Simplot Plant Area (land owned and therefore controlled by Simplot), where groundwater flows into the Offplant Area (as discharge to the Portneuf River via springs and underflow to the river itself). The goal of the remedy was therefore to reduce concentrations of COCs in groundwater discharging to springs or the river to below MCLs or Risk-Based Concentrations, thereby protecting human health and the environment and meeting all applicable and relevant and appropriate requirements. Requiring additional extraction beyond the goals established by the CERCLA process would entail significant additional cost without providing measurable increased protection.

The extraction system design presented in the draft Groundwater Extraction System Remedial Design Report, provided in early August, is consistent with the remedy described above and will meet the remedial action objectives and associated performance standards set out in the Consent Decree Statement of Work and provide benefit for the TMDL process Simplot is currently engaged in with IDEQ. The balance provided in the draft design is to reasonably control the groundwater affected by gypsum stack seepage without excessive extraction of relatively clean groundwater that cannot be incorporated into the Don Plant water balance. The design document is also consistent with Simplot's overall philosophy for the groundwater extraction system, which is to efficiently complete the design and get the system up and running and identify modifications needed to protect human health and the environment through the on-going groundwater monitoring program. Thus, we recognize that changes may be needed to the system once it is operating.

This approach is the most appropriate because of the complexity of the system, due to the characteristics of the gypsum stack source, the complex geology and hydrogeology, and the complicating factor of commingling plumes from groundwater contamination from the gypsum stack seepage and from FMC sources. Simplot and FMC have already spent an inordinate amount of time, energy and money through the Remedial Investigation/Feasibility Study process and an extensive body of information exists for the site. In addition, Simplot voluntarily performed fieldwork to support remedial design at the time of the Record of Decision in 1998. Performing a great deal of additional investigation and analysis/modeling beyond what is planned during the design will provide only a small benefit in terms of understanding system performance compared to actually operating the system and monitoring its performance, which Simplot believes is the most effective path toward achieving the remedial action objectives.

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Simplot remains committed to performing a rapid design of the extraction system with the goal of beginning extraction in the summer of 2003. As such, Simplot was already performing work to support the next phase of design. As a follow up to the October 16, 2002 meeting, the remainder of this letter provides a summary of the fieldwork and design analyses Simplot plans to perform in the near term along with a schedule. Most of the activities had been planned by Simplot to support completion of the design, but modifications/additions have been made based on discussions at the meeting.

### **West Plant Area**

- 1) Simplot will complete the field work set out in the work plan for well inspection, testing and installation program, submitted to the Agencies in mid-September.
- 2) Simplot will contact FMC to obtain access to monitor water levels in nearby FMC wells (136, 142, 143, 144, 145, 164) during the pumping test of proposed extraction test well 402. Simplot will perform the work if granted access by FMC.
- 3) Simplot will contact FMC to obtain approval to install a piezometer into the first saturated zone on FMC property approximately 200 feet west-northwest of well 308 for use in preparing more accurate potentiometric maps and to monitor water levels during the 402 pumping test (see attached map for proposed location). Simplot will perform the work if granted access by FMC.
- 4) Simplot will request from EPA and/or FMC the logs and any water quality/water level data for abandoned FMC test wells TW-7S and TW-8S.
- 5) Simplot will prepare potentiometric maps over time that include recent water level data from FMC wells in the joint fence line area.
- 6) Once the above information is obtained, Simplot will review and update the analyses supporting the proposed extraction well locations and pumping rates in terms of their effectiveness in capturing groundwater affected by gypstack seepage.

# **East Plant Area**

- 1) Simplot will complete the field work set out in the work plan for well inspection, testing and installation program, submitted to the Agencies in mid-September.
- 2) Simplot will install wells (one shallow and one deep) in the area east of well 332 to obtain water level and water quality data for these zones downgradient of the eastern

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part of the lower gypsum stack (see attached map for proposed locations).

- 3) Simplot will conduct groundwater monitoring at wells 305 and PEI-4, near the lower gypsum stack to obtain more current data.
- 4) Simplot will conduct sensitivity analyses for FLOWPATH modeling in East Plant Area, specifically the effects of modifying hydraulic conductivity, aquifer thickness and gradients on well spacings and pumping rates to effectively contain gypstack-affected water.
- 5) Simplot will evaluate pre-gypstack drainage features to assess their potential effects on migration of gypstack seepage.
- 6) Once the above information is obtained, Simplot will review and update the analyses supporting the proposed extraction well locations and pumping rates in terms of their effectiveness in capturing groundwater affected by gypstack seepage.

## **Bedrock Knob Area**

- 1) Simplot will complete the field work set out in the work plan for well inspection, testing and installation program, submitted to the Agencies in mid-September.
- 2) Simplot will install shallow zone wells near SWP-6 (north of knob) and on east side of knob (location of currently planned rotosonic boring) to obtain additional shallow zone water level and water quality data.
- 3) Once the above information is obtained, Simplot will review and update the analyses supporting the proposed west plant area extraction well locations and pumping rates in terms of their effectiveness in capturing groundwater affected by gypstack seepage. The evaluation will consider the flow/arsenic mass potentially moving through the bedrock knob area.

# **General Issues for Extraction System Design**

- 1) Simplot will estimate the reduction in production well pumpage as a result of extraction well pumpage and potential effects of the reductions on capture/containment in the lower zone.
- 2) Simplot will evaluate and quantify the effects of turnaround (extraction wells down for up to 3 weeks, production well pumpage partially curtailed) on hydraulic containment.

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3) The contamination in the vicinity of wells 312 and 324 (northwest corner of plant area) is coming off FMC plant area; therefore, no action by Simplot is necessary.

# **Data Requested by EPA**

- 1) Simplot will prepare table of well data, including production wells (well number, date drilled, depth, screened interval, monitored or producing intervals).
- 2) Simplot will provide the logs, completion data and available water quality data for production wells.
- 3) Simplot will prepare revised or new cross sections as described in EPA Agenda. Two of the cross sections requested by EPA are presented in the Remedial Investigation Report.

#### **Schedule**

A schedule for the fieldwork and supporting design analyses is attached. The fieldwork described above would be completed in conjunction with ongoing work by the middle of December. The additional analyses of hydrogeologic data and clarification of the extraction system design will be completed by early January.

## **Summary**

Simplot looks forward to working with you and your contractor team to the efficient and rapid design and implementation of the groundwater extraction system. As discussed in this letter, Simplot's overarching approach is to efficiently complete the design and get the system up and running. Our proposal is consistent with the Record of Decision and will bring immediate benefits to the environment, including reductions of orthophosphate loading to the Portneuf River. The basis for the design presented in the August draft report is achievement of the remedial action objectives and performance standards set out in the Record of Decision and Consent Decree and the TMDL objectives. If performance standards or objectives are not being met, the ongoing groundwater monitoring program will allow for identification of specific extraction system modifications required to protect human health and the environment. We believe this is consistent with the intent of the Record of Decision, and is the most efficient approach for rapidly achieving the remedial action objectives.

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As a follow up to discussions on the overall goal for the extraction system, I suggest a meeting with you and IDEQ to clarify Simplot's understanding of the groundwater remedy and to chart the path forward. Please do not hesitate to call me at (208) 389-7365 if you have any questions or comments.

Sincerely,

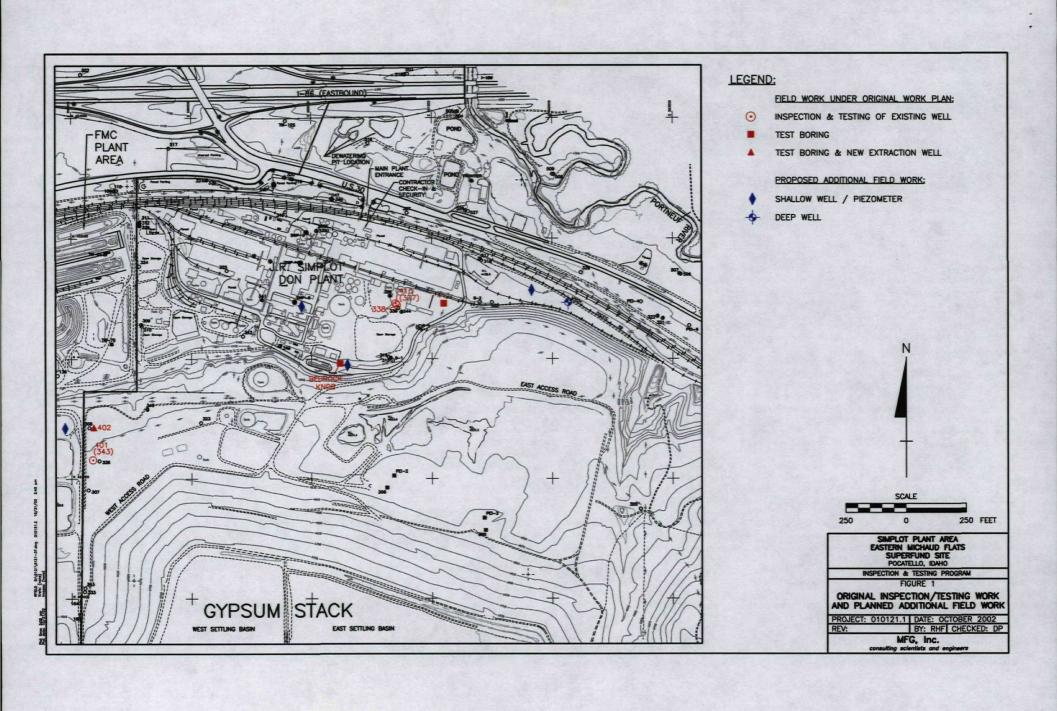
Alan L. Prouty

Director, Environmental & Regulatory Affairs

C: Doug Tanner - IDEQ Pocatello

Roger Turner – Shoshone-Bannock Tribes

Mark Dietrich - IDEQ Pocatello



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complete and develop well								xxx			<b></b> -							$\vdash$
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350-400 ft west of 315/316 (east of k	(nob)											-	-					-
between 332 and 328			-															-
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